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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,768	07/28/2003	Raymond F. Ryan	5011-017	5781

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EXAMINER

PHAM, MINH CHAU THI

ART UNIT PAPER NUMBER

1724

DATE MAILED: 01/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/628,768

Applicant(s)

RYAN ET AL.

Examiner

Minh-Chau T. Pham

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1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 4, 5 and 7-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4, 5 and 7-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 4, 5 and 7-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Calsteren et al (3,944,405) or Taylor et al (3,363,539).

Calsteren et al disclose a biological safety cabinet (1) comprising a work chamber (3), a fan enclosure having an exhaust port (see Fig. 2), a conduit extending from the contaminated air outlet to the fan enclosure, a first HEPA filter (12) between the contaminated air outlet (3) and the fan enclosure, and a fan (13) within the fan enclosure to convey air through the HEPA filter (12) into the fan enclosure and the fan (13) being isolated from contaminated air by the first filter (12), and a second filter (18) between fan enclosure (15) and the work chamber (6) (see Fig. 2). Taylor et al disclose a biological safety cabinet (A) comprising a work chamber, a fan enclosure having an exhaust port (see Fig. 2), a conduit extending from the contaminated air outlet to the fan enclosure, a first HEPA filter (26) between the contaminated air outlet and the fan enclosure, and a fan (18) within the fan enclosure to convey air through the HEPA filter (26) into the fan enclosure and the fan (18) being isolated from contaminated air by the first filter (26), and a second filter (24) between fan enclosure and the work chamber (see Fig. 2). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a filter at the inlet and outlet of the fan enclosure as taught by either Calsteren et al or Taylor et al to provide a sterile laminar airflow device which substantially devoid airborne particulate contaminants.

***Response to Amendment***

Applicant's arguments filed on October 20, 2004 have been fully considered but they are not persuasive.

Applicant argues that none of the cited references discloses "an apparatus in which the fan is isolated from contaminated air wherein the fan located within a fan enclosure with an HEPA filter being positioned across the fan enclosure inlet to filter the contaminated air before it enters the enclosure". The Examiner now drops both Thakur and Landy references and newly introduces Calsteren et al and Taylor et al as the primary references to show: Calsteren et al disclose a biological safety cabinet (1) comprising a work chamber (3), a fan enclosure having an exhaust port (see Fig. 2), a conduit extending from the contaminated air outlet to the fan enclosure, a first HEPA filter (12) between the contaminated air outlet (3) and the fan enclosure, and a fan (13) within the fan enclosure to convey air through the HEPA filter (12) into the fan enclosure and the fan (13) being isolated from contaminated air by the first filter (12), and a second filter (18) between fan enclosure (15) and the work chamber (6) (see Fig. 2). Taylor et al disclose a biological safety cabinet (A) comprising a work chamber, a fan enclosure having an exhaust port (see Fig. 2), a conduit extending from the contaminated air outlet to the fan enclosure, a first HEPA filter (26) between the contaminated air outlet and the fan enclosure, and a fan (18) within the fan enclosure to convey air through the HEPA filter (26) into the fan enclosure and the fan (18) being isolated from contaminated air by the first filter (26), and a second filter (24) between fan enclosure and the work chamber (see Fig. 2). It would have been obvious to a

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person having ordinary skill in the art at the time the invention was made to provide a filter at the inlet and outlet of the fan enclosure as taught by either Calsteren et al or Taylor et al to provide a sterile laminar airflow device which substantially devoid airborne particulate contaminants.

Applicant's arguments with respect to claims 4, 5 and 7-17 have been thoroughly considered but are moot in view of the new ground(s) of rejection as discussed above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571) 272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read 'Minh-Chau Pham', written over the printed name.

**Minh-Chau Pham**

**Patent Examiner**

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**December 30, 2004**